REMARKS

Claims 14-26 are pending in the present application and are rejected. Claims 14 and 18 are herein amended.

Applicants' Response to Claim Rejections under 35 U.S.C. § 112

Claims 18 and 20-26 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The Office Action indicates that in claim 18, the limitation "further comprising an opening is formed at a top of the elevating space" appears to be grammatically incomplete and is confusing. In response, Applicants herein amend claim 18 in order to delete the word "is." Applicants submit that this amendment is sufficient to overcome the rejection, and does not raise any new issues requiring further search or consideration.

Applicants' Response to Claim Rejections under 35 U.S.C. §102

Claims 14, 15 and 18 were rejected under 35 U.S.C. §102(b) as being anticipated by Iwasaki (U.S. Patent No. 6,134,482).

It is the position of the Office Action that **Iwasaki** discloses the invention as claimed. **Iwasaki** discloses a method and apparatus for controlling semiconductor wafer fabrication equipment. **Iwasaki** discloses in Figure 7 a two-level stocker 10 which works in conjunction with OHS 9 in order to transport and store articles. Stocker 10 includes lift 10a, lift stage 10b,

loader 10c, feed mechanism 10d, delivery stage 10e, stocker crane 10f, and stocker shelves 10g. Stocker shelves 10g are used to store cassettes 2, which are then transported by stocker crane 10f to the delivery stage 10e. Utilizing the feed mechanism 10d and lift stage 10b of the lift 10a, the cassette 2 is raised from the second floor to the third floor. The article 2 is then transferred onto a carriage 9a by loader 10c.

In response, Applicants respectfully submit that **Iwasaki** does not disclose that "said overhead traveling carriage and said running rail are disposed above said stocker." Claim 14 recites that the stocker includes both the elevating space and the storage space. Thus, claim 14 requires that the overhead travelling carriage and the running rail are both disposed above the elevating space and the storage space.

While it is clear that the OHS 9 of **Iwasaki** is disposed above the part of the stocker 10 which contains the stocker shelves 10g, Applicants respectfully submit that OHS 9 is not disposed above the part of stocker 10 which is an "elevating space." The Office Action on page 2 of the Office Action describes the elevating space as "the operating area of lift stage 10b and loader 10c." Applicants submit that OHS 9 is not disposed above the lift stage 10b, but rather is disposed at the same height or below loader 10c. In fact, OHS 9 cannot be above lift stage 10b and loader 10c, because it would be impossible to load cassette 2 in such a case. Thus, claim 14 distinguishes over **Iwasaki**. Furthermore, Applicants also amend claim 14 in order to recite that the storage space and the elevating space are of equal height. Applicants submit that the above comments and/or the claim amendments are sufficient to distinguish over **Iwasaki**. Favorable reconsideration is respectfully requested.

Claims 14, 15, 17 and 19 were rejected under 35 U.S.C. §102(e) as being anticipated by Kim (U.S. Publication Application No. 2004/0091338).

It is the position of the Office Action that **Kim** discloses the invention as claimed. **Kim** discloses a transfer system and apparatus for workpiece containers. It is initially noted that the Office Action refers to both elements from the prior art illustrated in Figure 1 and from the actual invention illustrated in Figures 3-20. The prior art in Figure 1 discloses a transfer system having an overhead rail 18a upon which a vehicle 22a travels. The vehicle 22a holds a front open unified pod ("FOUP") 20a, and lowers it onto load port 16a. The FOUP 20a is then transported into a transfer chamber by a transfer robot, and then into a processing device 1.

The invention of **Kim** discloses in Figure 3 a stocker 102 and a processing device 100 disposed next to a transfer system 70 which is comprised of a floor-mounted guide rail 108 and a transfer shuttle 110, which carries a FOUP 120. As illustrated in Figure 4, 5 and 7, for example, the transfer shuttle 110 contains an apparatus used to hoist the FOUP 120 into a stocker 102 or a processing device 100. As illustrated in Figure 4, a transfer chamber including a transfer robot 104 is utilized in conjunction with either the stocker 102 or the processing device 100, similar to the processing device 1 of the prior art illustrated in Figure 1.

It appears that the position of the Office Action is that Figure 1 anticipates the claimed invention, if used to load a stocker instead of a processing device. It is the position of the Office Action that the space above load port 16a is an elevating space in which a platform is raised or lowered. Further, the Office Action states that the flat end of the transfer robot is raised or

lowered. It is unclear whether the Office Action argues that the transfer chamber of the prior art is a "storage space."

In response to this rejection, Applicants respectfully submit that **Kim** does not disclose the invention as claimed. A storage space is not disclosed in the prior art. In the prior art of **Kim**, a separate component would be used as a stocker, similar to the processing devices 100 and stockers 102 illustrated in Figure 3.

Even if a stocker 102 were used in conjunction with the prior art of Figure 1, and even if the transfer chamber of the prior art could be considered a storage space, the transfer robot does not raise or lower an article. It merely moves within a single plane to transfer a FOUP 20a from the load port 16a to the load lock of a processing device 1, or perhaps of a stocker. Additionally, Applicants also amend claim 14 in order to recite that the storage space and the elevating space are of equal height. Applicants submit that the above comments and/or the claim amendments are sufficient to distinguish over **Kim**. Thus, Applicants respectfully traverse the rejection. Favorable reconsideration is respectfully requested.

Claims 14, 15, 17 and 19 were rejected under 35 U.S.C. §102(e) as being anticipated by Lan et al. (U.S. Publication Application No. 2003/0053892).

It is the position of the Office Action that **Lan** discloses the invention as claimed. **Lan** discloses a loadport with an automatic height adjustment means. The prior art of **Lan** discloses an overhead track 38 having vehicles 34 and 36 which carry FOUPs 44. These FOUPs 44 are loaded/unloaded to and from input port 40 and output port 42. See Figure 2. Alternatively, this

construction can be used with process machine 14 having a loadport 12 as illustrated in Figure 3. However, according to **Lan**, "a wet etching apparatus is sometimes equipped with an internal buffer (or internal stocker) since a high volume of wafers is being processed by the apparatus." See paragraph [0008].

Lan further discloses an improved loadport 50 having a platform 62 which may be raised or lowered. See Figures 7 and 8. This loadport 50 is illustrated as being adjacent to semiconductor processing equipment 52. It is not stated whether this processing equipment 52 contains an internal stocker. It is noted that the loadport 50 is not disclosed to be used in conjunction with a stocker 30.

It appears that the Office Action is broadly interpreting the semiconductor processing equipment 52 and the load port 50 in combination to be a stocker. That is, the Office Action interprets the platform 62 to be a "platform which is raised and lowered" and the space above the platform 62 to be an elevating space. It appears that the Office Action argues that a part of semiconductor processing equipment 52 is a stocker.

In response, Applicants respectfully submit that **Lan** actually discloses two separate components, semiconductor processing equipment 52 which optionally includes an internal stocker, and a load port 50. Additionally, Applicants also amend claim 14 in order to recite that the storage space and the elevating space are of equal height. Applicants submit that the above comments and/or the claim amendments are sufficient to distinguish over **Lan**. Favorable reconsideration is respectfully requested.

Applicants' Response to Claim Rejections under 35 U.S.C. §103

Claim 16 was rejected under 35 U.S.C. §103(a) as being unpatentable over Kim in view of Watanabe et al. (U.S. Patent No. 6,089,811).

It is the position of the Office Action that **Kim** discloses the invention as claimed, except that the stocker is at the end of the processing line instead of inside a gap. The Office Action relies on **Watanabe** to provide this teaching. The Office Action refers to Figure 2, but it appears that the Examiner discusses Figure 1. Figure 1 discloses a main transport path 1 and subsidiary paths 5. Figure 1 also discloses stockers 6 and processing apparatuses 7.

It is noted that the Office Action states that **Watanabe** discloses arranging stockers on a "main supply path." This language is not present in claim 16. Therefore, Applicants respectfully submit that claim 16 is patentable due to its dependency on claim 14, which Applicants argue is patentable for the reason discussed above.

Claims 18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lan in view of Chao (U.S. Patent No. 6,519,502).

It is the position of the Office Action that **Lan** discloses the invention as claimed, with the exception of a structure forming an opening at the top of the elevating space. The Office Action relies on **Chao** to provide this teaching. In response, Applicants respectfully submit that claims 18 and 20 are patentable due to their dependency on claim 14 as discussed above. Favorable reconsideration is respectfully requested.

Claims 21-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Iwasaki in view of JP4-80107 (JP '107).

It is the position of the Office Action that **Iwasaki** discloses the invention as claimed, with the exception of the details of the lift stage as to have it engage the bottom surface of the article. The Office Action relies on **JP '107** to provide this teaching. **JP '107** appears to disclose a device for transporting and stocking trays. Applicants respectfully submit that claims 21-25 are patentable due to their dependency on claim 14 which Applicants argue is patentable for the reasons discussed above. Favorable reconsideration is respectfully requested.

Allowable Subject Matter

The Office Action indicates that claims 25 and 26 would be allowable if re-written in independent form including all the limitations of the base claim and the intervening claims and rewritten to avoid the rejection under 35 U.S.C. §112.

It is noted that the Office Action indicates that claim 25 is allowable, but also indicates that claim 25 is rejected under 35 U.S.C. §103(a) over **Iwasaki** in view of **JP '107**. It is unclear whether the Office Action regards claim 25 as allowable or not.

Regardless, because Applicant submit above that claims 14-25 are patentable for the reasons discussed above, Applicants respectfully decline to rewrite claims 25 or 26 in independent form at this time.

For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned agent.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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